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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,612	01/12/2004	Young-Ho Kim	0630-1918P	8543
2292 7590 08/13/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER RIGGLEMAN, JASON PAUL	
			ART UNIT 1746	PAPER NUMBER
			NOTIFICATION DATE 08/13/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/754,612

Applicant(s)

KIM ET AL.

Examiner

Jason P. Riggleman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-20 is/are allowed.
- 6) ☒ Claim(s) 1,5 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 7-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's reply filed on 7/18/2007 is acknowledged. Current pending claims are 1-20. Applicant's arguments, see pg. 3, 3rd paragraph, of arguments, filed 7/18/2007, with respect to the rejection(s) of claim(s) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Neyhouse et al. (US Patent No. 3049021) in view of Wahl (US Patent No. 2255200) and Dausch et al. (US Patent No. 5669095) and Koshiga et al. (European Patent Application No. EP0949374).
2. The 102 (b) rejection of claims 1-2 and 5-6 by Yoon (International Publication No. WO02/40761), or in the alternative, under 35 U.S.C. 103(a) as obvious over Yoon (International Publication No. WO02/40761) in view of Dausch et al. (US Patent No. 5669095) and Koshiga et al. (European Patent Application No. EP0949374) are withdrawn. The 103 (a) rejection of claim 4 over Yoon (US Patent No. 6176108) as modified by Mikio et al. (Japanese Patent Application Publication No. 2001-204989), and further in view of Brien (US Patent No. 5209085) is withdrawn. The 103 (a) rejection of claim 3 over Yoon (International Publication No. WO02/40761) in view of Mikio et al. (Japanese Patent Application Publication No. 2001-204989) is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neyhouse et al. (US Patent No. 3049021) in view of Wahl (US Patent No. 2255200) and Dausch et al. (US Patent No. 5669095) and Koshiga et al. (European Patent Application No. EP0949374).

5. Neyhouse et al. teaches a washing machine comprising an outer tub 24; inner tub 32; and a washing machine casing 16. An electric motor 16 is provided which has an output shaft connected with a conventional two-speed transmission 48 (Column 2, Lines 55-62).

6. Neyhouse et al. does not teach rotation transmission means which control the rotational speeds of the tub during the laundering/dehydrating operation; however, Wahl teaches a conventional washing machine transmission in which the motor transmits a rotational force to rotate the shaft at low R.P.M. (a 5:1 motor to drive shaft ratio) during the washing operation and during the drying operation the clutch plate is engaged and the drive shaft is rotated at the same high speed as the motor shaft (1:1 motor to drive shaft ratio)(pgs. 2-3, Lines 70-75 and Lines 0-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Neyhouse et al. with a conventional two-speed washing machine transmission to achieve the expected result.

7. Neyhouse et al., as modified by Wahl, does not teach an induction motor; however, Dausch et al. teach the use of an induction motor for driving a washing machine. Dausch et al. teaches that AC induction motors are commonly used in mass-

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manufactured household appliances as such motors are comparatively simple, reliable, robust, and effectively provide the motive power for the various functions of a washing machine (Column 4, Lines 39-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Neyhouse et al., as modified by Wahl, with Dausch et al. to create a washing machine which has a simple, reliable, and robust driving motor.

8. Neyhouse et al., as modified by Wahl, as modified by Dausch et al., does not teach the rotor/stator detail; however, Koshiga et al. teaches, paragraph [0025], the use of a rotor 45a having a magnet on its outer circumference for apply a magnetic field and a stator 45b disposed at the outer circumferential side of the magnet for applying a magnetic field to the rotor. A gap S is provided between the stator 45b and the rotor 45a. The inner tub rotated co-axially with a rotational center of the rotor, Fig. 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Neyhouse et al., as modified by Wahl, as modified by Dausch et al., with Koshiga et al. to create a induction motor driven washing machine which has an effective rotor and stator arrangement.

Allowable Subject Matter

9. Claims 2-4 and 7-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. The following is a statement of reasons for the indication of allowable subject matter: the planetary-sun-ring gear arrangement which controls the speed of the motor/tub is not an obvious modification of Neyhouse et al. in view of Wahl.

11. Claims 13-20 allowed.

12. The following is an examiner's statement of reasons for allowance: The closest prior art, Burk et al. (US Patent No. 5000016) teaches a washing machine which has basket and agitator which are reversely oscillated during a wash mode and co-rotated during a liquid extraction. Burk et al. also teaches a planetary gear reduction arrangement in the transmission; however, there is no suggestion that the that tub and pulsator are capable of rotating in the same direction at the same speed as the motor because this is not possible with the transmission of Burk et al. and is not an obvious modification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Burk et al. (US Patent No. 5000016) which teaches a washing machine which has basket and agitator which are reversely oscillated during a wash mode and co-rotated during a liquid extraction. Burk et al. also teaches a planetary gear reduction arrangement in the transmission. Bell et al. teaches a washing machine

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which has a pulsator and inner tub which spin oppositely and are decelerated from the motor speed during washing; however, the during the same speed inner tub-pulsator dewatering operation they are still decelerated from the motor by a gear reduction, Fig. 6.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Riggleman whose telephone number is 571-272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JPR

MICHAEL KORNAKOV
PRIMARY EXAMINER

Jason P Riggleman
Examiner
Art Unit 1746

M. Kornakov
08/06/07

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